

Notice of Allowability

Application No.

09/651,519

Examiner

Quang N. Nguyen

Applicant(s)

SAHAI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 05/20/2005.
2. ☒ The allowed claim(s) is/are 1-26 and 29.
3. ☒ The drawings filed on 30 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

Examiner's Amendment

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment maybe filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Dan C. Hu on January 10th, 2005.

3. Please change claim 1 to:

A method ~~for obtaining information useful for management of a composite e-service,~~ comprising:

generating a set of management information for each of ~~a set of~~ service interactions among ~~a set of~~ e-services in ~~[[the]]~~ a composite e-service, ~~the e-services~~ arranged in a tree structure including a first e-service that provides a portal to the composite e-service;

in performing the ~~set of~~ service interactions, at least the first e-service sending a first request to a second e-service at a first lower level of the tree structure, ~~[[and]]~~ the second e-service sending a second request to a third e-service at a second lower level of the tree structure lower than the first lower level, and the third e-service

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sending a third request to a fourth e-service at a third lower level of the tree structure lower than the second lower level;

transferring the sets of management information up the tree structure to the first e-service ~~that provides the portal~~; and

combining the management information at ~~each of a set of levels of the tree structure~~ the first e-service and at the e-services at the first and second lower levels of the tree structure.

4. Please change claim 2 to:

The method of claim 1, further comprising: in performing the ~~set of~~ service interactions, at least the third e-service sending a response to the second e-service in response to the second request, and the second e-service sending a response to the first e-service in response to the first request.

5. Please change claim 11 to:

A composite e-service comprising ~~a set of~~ e-services arranged in a tree structure including a first e-service that provides a portal to the composite e-service, each e-service having a manager such that the managers generate a set of management information for each of ~~a set of~~ service interactions among the e-services and transfer the sets of management information up the tree structure to the first e-service ~~while combining the management information at each of a set of levels of the tree structure,~~

wherein to perform the service interactions, the first e-service ~~to send one or more~~ sends requests to ~~one or more~~ e-services at a first lower level of the tree structure, ~~[[and]] the one or more e-services at the first lower level to send one or more~~ sends requests to ~~one or more~~ e-services at a second lower level in the tree structure lower than the first lower level, and the e-services at the second lower level sends requests to e-services at a third lower level of the tree structure lower than the second lower level,

wherein the first e-service, and e-services at the first and second lower levels are each adapted to combine the management information received from e-services at respective lower levels of the tree structure.

6. Please change claim 21 to:

A system comprising:

a plurality of modules to provide a set of digital services arranged in at least four levels of a tree structure, the digital services comprising at least one of on-line electronic commerce services, on-line news services, on-line sports services, on-line entertainment services, and on-line educational services;

the modules to communicate to enable the digital services to interact,

the modules to generate sets of management information as a result of the interacting of the digital services,

the modules to transfer the sets of management information up the tree structure and to combine the management information at each module at least at three of the four levels as the management information is transferred up the tree structure.

7. Please change claim 29 to:

The composite e-service of claim 11, wherein each of the first e-service and e-services at the first, ~~[[and]]~~ second, and third lower levels provides at least one of on-line electronic commerce services, on-line news services, on-line sports services, on-line entertainment services, and on-line educational services.

8. Please cancel claims 27-28 and 30-31.

9. The following is an examiner's statement of reasons for allowance:

In interpreting the amended claims, in light of the specification and the applicant's arguments filed on 05/20/2005, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.

Angal et al. (US 6,064,656), teach a distributed system and method for controlling access control to network resources, i.e., management objects in a computer network, wherein at least one of a plurality of access control servers (*the management information server*) receives access requests from users and distributes the received access requests among the access control servers for processing (**Angal, Abstract, C3: L37-62**).

McCollum (US 6,427,168) teaches a method and system for communicating management information via COM (*Component Object Model*) and/or DCOM (*Distributed Component Object Model*) by invoking methods of objects over an underlying protocol such as TCP or any suitable interprocess communication mechanism such as XML/CIM over HTTP (**McCollum, C5: L5-21**).

Hoang (US 6,459,700) teaches multiple segment network device configured for a stacked arrangement, wherein each management information object is accessed or otherwise referenced using a corresponding object identifier "OID" (*i.e., an indicator*) which comprises a sequence of integers for traversing the successive nodes of the tree structure (**Hoang, C22: L40-44**).

However, the prior art of record fails to teach or suggest individually or in combination that a communication method and system for decentralizing management of composite digital services, comprising: generating a set of management information for each of service interactions among e-services in a composite e-service arranged in a tree structure including a first e-service that provides a portal to the composite e-service; in performing the service interactions, at least the first e-service sending a first request to a second e-service at a first lower level of the tree structure, the second e-service sending a second request to a third e-service at a second lower level of the tree structure lower than the first lower level, and the third e-service sending a third request to a fourth e-service at a third lower level of the tree structure lower than the second lower level; transferring the sets of management information up the tree structure to the first e-service; and combining the management information at the first e-service and at

the e-services at the first and second lower levels of the tree structure as set forth in independent claims 1, 11 and 21. Claims 1-26 and 29 are allowed because of the combination of other limitations and the limitation listed above.

The examiner finds the Applicant's arguments on pages 8-11 of the Remarks filed on 05/20/2005 to be persuasive. The applicant argued in substance that the combination of prior art of records fail to disclose the features of the invention including at least the first e-service sending a first request to a second e-service at a first lower level of the tree structure, the second e-service sending a second request to a third e-service at a second lower level of the tree structure lower than the first lower level, and the third e-service sending a third request to a fourth e-service at a third lower level of the tree structure lower than the second lower level; transferring the sets of management information up the tree structure to the first e-service; and combining the management information at the first e-service and at the e-services at the first and second lower levels of the tree structure, as claimed in the invention to enable decentralized management of a composite e-service by obtaining information which is useful for management of the composite e-service even when the arrangement of the composite e-services that make up the composite e-service are dynamically changing (see Remarks, pages 8-11 and see Specification, Summary of the Invention).

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10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Examiner's Amendment."

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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